

REMARKS

The present amendment is submitted in response to the outstanding Final Office Action dated April 7, 2004 and is believed to be fully responsive to the objections and rejections raised therein. In view of the foregoing amendments and the comments which follow, favorable reconsideration and allowance are respectively requested.

Claims 1-23 are pending in the present application. Claims 13, 14, 21, 22 and 23 have been cancelled by this amendment, and claim 15 has been amended.

In paragraph 3 of the Office Action, claims 6, 10, 15-16 and 21 were rejected under 35 U.S.C. § 102(e) as being anticipated by Naiff.

With regard to claim 10, the Office Action asserts that Naiff teaches a card 40 for a personal computer 20 having a circuit board that plugs into the personal computer and which is coupled to exchange data via an industry-standard bus (PCI). The Office Action further asserts that the radio frequency modulator circuitry on the circuit board receives the data and transmits radio frequency signals responsive thereto, and includes means for modulating the television signals on a carrier for output to the television appliance on a standard television channel frequency. The Office Action then states that the card 40 of Naiff receives data from a television service provider, processes and transmits the television signal to the television via transceiver on the card and simple antenna, and that the card further receives data from the user and transmits the data to the television service provider by an RF return path using telephone connection or satellite transceiver, wherein the radio frequency signals are transmitted to a satellite.

The Naiff reference is directed to a personal computer-based set-top converter for television services. The section of the specification beginning on line 10 of Column 5 does not support the interpretation asserted in the Office Action. Rather, this section states that although a cable television implementation is illustrated, the signals communicated via input cable 10 could just as easily come via a satellite or MMDS television distribution system. The signals could also be received via fiber optic cable or copper wires from an alternative television signal

supplier, such as a local telephone company. This entire section is devoted to the teaching of the reception of a signal, not the transmission from the PC to another receiving element.

While the specification recites in Column 6 beginning on line 29 that "alternatively, communication with the internet and/or the television service provider can be accommodated by an RF return path via coaxial optical fiber cables 16, 10," claim 10 specifically recites that the circuit board has radio frequency modulation circuitry which receives the data and transmits radio frequency signals responsive thereto. Thus, a single circuit board performs the function of the reception and transmission of the radio frequency signals. There is no teaching or suggestion in Naiff for having both of these functions performed by a single circuit board and the responsive transmission to sent to a satellite. The transmission via the wireless link 104 is not to a satellite. As a result, Applicant respectfully traverses the rejection of claim 10.

Similarly, with regard to claim 6, Applicant submits as was the case with claim 10, that Naiff does not teach or suggest this feature of a single board for performing the function of the reception of the data and transmission of radio frequency signals responsive thereto. Consequently, Applicant respectfully traverses the rejection of claim 6. The signals received in the Naiff device are television signals. Signals sent from the PC of Naiff are not responsive to the received television signals.

With regard to claim 15, this claim has been amended to include the limitations of claim 21 and claim 21 has been cancelled. In particular, claim 15 now recites the step of transmitting the signal comprised of transmitting the signal to a satellite. As was the case with claim 10, Applicants submit that the Naiff patent fails to teach the transmission directly from the circuit board to a satellite. In addition, claim 15 recites that it is method for transmitting a radio frequency signal directly from a personal computer and that in step c, the step is transmitting the radio frequency signal from the card to an antenna responsive to the data. Once again, there is no teaching or suggestion of the transmission of a radio frequency signal from the card 40 in Naiff to an antenna. Consequently, Applicant respectfully traverses this rejection.

Claim 16 depends from claim 15 and Applicants submit that claim 16 is not anticipated by Naiff for the same reasons set forth with regard to claim 15.

In paragraph 5 of the Office Action, on page 6, claims 1, 7 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Naiff in view of Dillon.

Claim 1 recites radio frequency modulation circuitry on the circuit board which receives the data and transmits radio frequency signals responsive thereto wherein the card is coupled to an external system, and comprises a connector through which a DC source external to the card powers the antenna system. Applicants submit that Naiff fails to teach a single circuit board that has radio frequency modulation circuitry on the board for receiving the data and transmitting radio frequency signals responsive thereto. Dillon does not cure the deficiencies of Naiff. Consequently, Applicants submit that claim 1 would not have been obvious to one of ordinary skill in the art at the time of the invention in view of Naiff combined with Dillon. Similarly, claim 7 depends from claim 1 and Applicants submit that this claim would not have been obvious for the same reasons set forth with regard to claim 1.

Claim 17 depends from claim 15. As was just pointed out with regard to claim 1, Naiff does not teach or suggest conveying data to the card via an industry standard computer bus in the personal computer and transmitting radio frequency signals from the card to an antenna responsive to the data wherein the data is transmitted to a satellite. Claim 17 recites the further step of mounting a power connector to the card and powering the antenna system external to the card via the power connector. Dillon does not cure the deficiencies of Naiff and therefore, Applicants submit that claim 17, as depends from claim 15, would not have been obvious to one of ordinary skill in the art at the time of the invention in view of Naiff and Dillon.

In paragraph 6 of the Office Action, claims 2-4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Naiff in view of Dillon and further in view of Cirineo. Claims 2-4 all depend from claim 1, and claim 2 recites that the circuitry comprises a frequency synthesizer generating the radio frequency signals. The Examiner notes that Naiff and Dillon do not teach this feature and relies upon Cirineo for this teaching. However, Cirineo does not cure the

deficiencies of Naiff and therefore, the combination of Naiff, Dillon and Cirineo would not render the present invention as recited in claims 2-4 obvious at the time of the invention since none of these references teach or suggest a single card which receives data and transmits radio frequency signals responsive thereto via an antenna system.

In paragraph 7 of the Office Action, claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Naiff in view of Dillon and further in view of Bock et al. The Bock et al. reference has been relied upon in the rejection for the teaching of a signal processor 68 in a transmitter card 62 which comprises an encoder that encodes error correction into the transmitted signals.

The Bock et al. references teaches providing selective broadcast receiver addressability. The signal processor 68 taught by Bock et al. is provided on an ISA card 62. However, the video input signal is received by an analog processing unit 44 and the output of the analog processing unit 44 outputs the video output signal to an antenna. Consequently, the card 62 does not receive the incoming signal and transmit the output signal to an antenna as recited in the claims of the present application. Furthermore, Applicants submit that Bock et al. merely teaches error correction of the input signal. On the other hand, the present invention as recited in claim 8, recites that the modulation circuitry includes an encoder which encodes error correction into the transmitted signals according to a predefined protocol in accordance with a command conveyed to the card via the industry-standard bus. Based on the foregoing, Applicants submit that Bock et al. does not teach this feature. In addition, Bock et al. and Dillon do not cure the deficiencies of Naiff and therefore, Applicants submit that claim 8, which depends from claim 1, would not have been obvious to one of ordinary skill in the art at the time of the invention in view of the art of record.

In paragraph 8 of the Office Action, claim 19 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Naiff in view of Bock et al.

Claim 19 depends from claim 15 and recites that the step of transmitting the radio frequency signal comprises encoding an error correction onto the signal in accordance with an

encoding scheme determined responsive to a command conveyed via the bus. Bock et al., on the other hand, is directed to providing selected data broadcast receiver addressability. While Bock et al. shows an ISA card 62 having a signal processor 68, this card does not receive the video input signal and does not output the video output signal. Rather, that is performed by a separate section 44 entitled the analog processing unit. Furthermore, the error correction element 92 provides error correction to the received signal, not the transmitted signal. Consequently, Applicants submit that claim 19 would not have been obvious in view of Naiff and Bock et al. at the time of the invention for the foregoing reasons and the for reasons set forth with regard to claim 15.

In paragraph 9 of the Office Action, claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Naiff and Dillon in view of Goldman et al. Claim 9 depends from claim 1 and recites that the card comprises an auxiliary connector through which the card is coupled to at least one other card located in the computer, such that signals pass between the cards without passing through the industry-standard bus. Applicant submits that neither Naiff nor Dillon nor Goldman teaches or suggests a single card which receives the data and transmits the RF signal, as was discussed previously with regard to the rejections based on Naiff and Dillon alone. Goldman does not cure these deficiencies, and therefore Applicants submit that claim 9 would not be obvious in view of the art of record.

In paragraph 10 of the Office Action, claims 11-14, 20 and 22-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Naiff in view of Goldman et al. Applicants note that, according to the present amendment, claims 13, 14, 22 and 23 have been cancelled. With regard to claims 11, 12 and 20, claim 11 recites RF circuitry on the circuit board which receives the data and processes RF signals responsive thereto, and an antenna connected to the circuit board wherein the antenna transmits RF signals received from the circuit board. Thus, it is clear that the RF circuitry performs the function of the reception of the data and the transmission of the RF signals to the antenna. As was stated previously with regard to the rejections based on Naiff, the Naiff reference fails to teach or suggest a single board for performing the reception and

transmission functions recited in the claims of the present application, Goldman et al. does not cure these deficiencies, and therefore, Applicants submit that claim 11 would not have been obvious in view of the art of record. Claim 12 depends from claim 11 and therefore, would not have been obvious for the same reasons set forth with regard to claim 11.

Finally, claim 20 depends on claim 15, and Applicants submit that claim 20 would not have been obvious for the same reasons set forth with regard to claim 15 in view of Naiff and Goldman because Goldman does not cure the deficiencies of Naiff and Naiff fails to teach the limitations of claim 15.

In paragraph 11, claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Naiff. Claim 18 recites that transmitting the radio frequency signal comprises modulating the signal in accordance with a modulation scheme determined responsive to a command conveyed via the bus. Claim 18 depends from claim 15. Applicants submit that claim 18 would not have been obvious in view of Naiff for the same reasons set forth previously with regard to the rejection of claim 15 as being anticipated by Naiff.

Applicants note that with regard to the rejections under 35 U.S.C. § 103(a) which rely upon multiple references, namely Naiff in view of Dillon, Naiff in view of Dillon and Cirineo, Naiff in view of Dillon and Bock, Naiff and Bock, Naiff and Dillon and Goldman, and Naiff and Goldman, that there is no teaching or suggestion in any of these references for their combination. While some of the references have similarities to specific recitations in the claims of the present application, the art of record relied upon in the Office Action does not provide teachings or suggestions for their combination. For example, with regard to the rejection of claim 8 in view of Naiff and Dillon and Bock et al., as Applicants noted, Bock et al. is directed to error correction on a receive signal, not a transmitted signal. Thus, the Bock reference would not be combined with the Dillon and Naiff references because there is no suggestion of performing error correction on the transmitted signaling block. Similarly, there is no teaching or suggestion for the combination of Dillon with Naiff or Cirineo with Naiff, etc. The only teaching or suggestion for the combination of these references can be found in the present application. It is

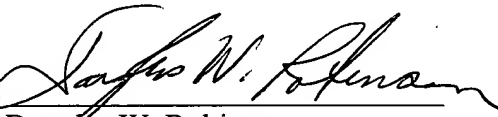
improper to combine prior art references when the only teaching or suggestion for such a combination is the application itself. The references must contain the teaching or suggestion for the combination or the rejection fails.

In view of the foregoing arguments, Applicants submit that the claims remaining in the present application, namely claims 1-12, and 15-20, are patentable over the art of record. In view of the fact that the present amendment merely cancels claims and adds the limitations of claim 21 to claim 15, Applicants submit that despite the fact that the outstanding Office Action is a final Office Action, the present amendment should be entered. Favorable consideration on the merits is respectfully requested.

Applicants hereby petition for any fees required to maintain the pendency of this case, except for the Issue Fee, and such fee is to be charged to Deposit Account No. 19-0733.

If for any reason the Examiner is unable to allow the application on the next Office Action and feels that an interview would be helpful to resolve any remaining issue, the Examiner is respectfully requested to contact the undersigned attorney for the purpose of arranging such an interview.

Respectfully submitted,

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